



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/238,851	01/27/99	PETERS	D 5545

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IM22/1201

EXAMINER
WEBB, G

ART UNIT	PAPER NUMBER
1751	

DATE MAILED: 12/01/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

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Office Action Summary

Application No.

09/238,851

Applicant(s)

PETERS ET AL.

Examiner

Gregory E. Webb

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1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 19 September 2000.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. Previous 112 rejections are withdrawn based on the applicant's amendments and arguments.

Claim Rejections - 35 USC § 102

2. Claims 1, 3, 5, 8, 10-12, 14, 15, and 16 remain rejected under 35 U.S.C. 102(b) as being anticipated by Torii et al (US 5,972,862).

Claim Rejections - 35 USC § 103

3. Claims 1-17 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Torii et al (US 5,972,862) in view of Ward et al (US 5,571,447).

Response to Amendment

4. Applicant's arguments filed 9/19/2000 have been fully considered but they are not persuasive.
5. With regard to previous 102 and 103 rejections, the applicant argues that Torii et al fail to demonstrate the use of a buffered solution.
6. Although Torii et al does not mention directly the pH or the buffered nature of their solutions, the examiner maintains that such properties would be inherent to the compositions of Torii et al. The examiner submits as evidence of the inherency Grant & Hackh's Chemical Dictionary's definition of buffer "b. solution – a solution of a weak acid or base and its salts, such as acetates, borates, phosphates, phthalates." The applicant states that ammonium acetate would form in the Torii et al solution. The applicant further states that the solution of Torii et al

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would not form an effective buffered systems which implies that a buffered system would in fact form.

7. Further support for the examiners contention that the solutions of Torii et al are buffered comes from The Merck Index. The Merck index describes a variety of standard buffers (i.e. buffered solution) for the calibration of pH meters. The Merck index specifically cites solutions of acetic acid as well as ammonia as standard buffer solutions for the calibration of pH meters.

8. The applicant further argues that claim rejections over Torii et al in view of Ward et al requires the picking and choosing of components to meet the applicant's claims. However, the examiner has not chosen elements at random or used hindsight to arrive at the applicant's claimed composition. The examiner has provided a clear motivation for the inclusion of each of the individual components.

9. For example, Ward et al teach that the addition of fluoroboric acid will maintain fluoride content of the solution. Torii et al are also concerned with the fluorine content of their composition (see col. 4, lines 45-63) and teach that multiple fluorine compounds can be used. Torii et al further teach the use of ammonium borofluoride, an ammonium salt of the fluoroboric acid. Addition of fluoroboric acid to a solution containing ammonium ions would naturally form ammonium borofluoride, a compound taught by Torii et al as an equivalent to other fluorine compounds. Furthermore, Torii et al require fluorine compounds and Ward et al teach that fluoroboric acid will maintain this fluorine content. Therefore, the examiner has not applied hind-site to arrive at this combination.

10. Concerning the gallic acid, here again the examiner has not performed picking and choosing of components. Ward provides a clear motivation for the inclusion of gallic acid as a

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corrosion inhibitor. Corrosion is a problem Torii et al are clearly aware of when they state "a content thereof less 0.1% by weight (fluorine) is unfavorable because of low removal rate of the deposit polymer, whereas a content thereof more than 15% by weight results in a tendency to corrode the wiring material." (see col 4, lines 51-63). One skilled in the art of cleaning semiconductors would clearly be aware of corrosion problems and as Ward clearly teaches a solution to this problem it would have been obvious to one skilled in the art to apply this corrosion inhibitor knowledge of Ward to other similar semiconductor cleaning solutions.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

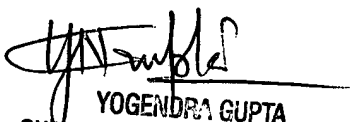
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory E. Webb whose telephone number is 703-305-4945. The examiner can normally be reached on 9:00-17:30 (m-f).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (703)308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-6078 for regular communications and 703-305-6078 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

gw
November 21, 2000


YOGENDRA GUPTA
SUPERVISORY PATENT EXAMINER